

TABLE 7-7

## S&amp;E doctorates awarded to U.S. citizens and permanent residents, by field, sex, ethnicity, and race: 2006–16

(Number)

Field, sex, ethnicity, and race	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
All S&E	18,400	19,595	20,186	20,560	20,570	21,600	22,258	23,218	24,393	24,671	24,544
Female	8,543	9,228	9,477	9,651	9,468	9,982	10,315	10,794	11,462	11,494	11,220
Male	9,857	10,367	10,709	10,909	11,102	11,618	11,943	12,424	12,931	13,177	13,324
Hispanic or Latino <sup>a</sup>	1,003	1,071	1,162	1,098	1,169	1,259	1,327	1,490	1,620	1,739	1,944
Female	557	602	639	564	620	654	701	844	879	918	1,046
Male	446	469	523	534	549	605	626	646	741	821	898
Non-Hispanic or Latino	17,397	18,524	19,024	19,462	19,401	20,341	20,931	21,728	22,773	22,932	22,600
Female	7,986	8,626	8,838	9,087	8,848	9,328	9,614	9,950	10,583	10,576	10,174
Male	9,411	9,898	10,186	10,375	10,553	11,013	11,317	11,778	12,190	12,356	12,426
American Indian or Alaska Native	96	105	102	120	103	108	99	107	110	117	104
Female	47	57	56	61	49	58	49	59	63	70	56
Male	49	48	46	59	54	50	50	48	47	47	48
Asian	na	na	na	na	na	2,073	2,166	2,173	2,218	2,315	2,244
Female	na	na	na	na	na	983	1,092	1,070	1,115	1,134	1,059
Male	na	na	na	na	na	1,090	1,074	1,103	1,103	1,181	1,185
Asian or Pacific Islander <sup>b</sup>	1,788	1,973	1,933	1,947	2,054	na	na	na	na	na	na
Female	826	897	924	937	1,031	na	na	na	na	na	na
Male	962	1,076	1,009	1,010	1,023	na	na	na	na	na	na
Black or African American	899	964	983	1,041	973	1,101	1,140	1,277	1,375	1,367	1,405
Female	546	582	594	630	598	673	684	762	843	844	866
Male	353	382	389	411	375	428	456	515	532	523	539
Native Hawaiian or Other Pacific Islander	na	na	na	na	na	33	20	23	33	26	30
Female	na	na	na	na	na	16	9	12	18	14	17
Male	na	na	na	na	na	17	11	11	15	12	13
White	13,246	13,981	14,220	14,552	14,278	14,748	15,255	15,816	16,497	16,559	16,302
Female	5,949	6,423	6,500	6,615	6,300	6,565	6,777	6,968	7,344	7,328	7,004
Male	7,297	7,558	7,720	7,937	7,978	8,183	8,478	8,848	9,153	9,231	9,298
More than one race <sup>c</sup>	na	na	na	na	na	182	232	276	377	434	545
Female	na	na	na	na	na	91	115	136	188	213	267
Male	na	na	na	na	na	91	117	140	189	221	278
Other or unknown race and ethnicity	1,368	1,501	1,786	1,802	1,993	2,096	2,019	2,056	2,163	2,114	1,970
Female	618	667	764	844	870	942	888	943	1,012	973	905
Male	750	834	1,022	958	1,123	1,154	1,131	1,113	1,151	1,141	1,065
Science	15,686	16,601	17,006	17,186	17,063	17,887	18,332	19,095	19,942	20,051	19,942
Female	7,937	8,551	8,673	8,795	8,562	9,062	9,314	9,775	10,360	10,330	10,093
Male	7,749	8,050	8,333	8,391	8,501	8,825	9,018	9,320	9,582	9,721	9,849
Hispanic or Latino <sup>a</sup>	898	933	1,032	945	973	1,077	1,136	1,288	1,373	1,453	1,659
Female	526	557	601	526	555	607	642	777	810	846	970
Male	372	376	431	419	418	470	494	511	563	607	689
Non-Hispanic or Latino	14,788	15,668	15,974	16,241	16,090	16,810	17,196	17,807	18,569	18,598	18,283
Female	7,411	7,994	8,072	8,269	8,007	8,455	8,672	8,998	9,550	9,484	9,123
Male	7,377	7,674	7,902	7,972	8,083	8,355	8,524	8,809	9,019	9,114	9,160
American Indian or Alaska Native	89	97	87	101	93	93	88	100	97	105	94
Female	46	55	51	55	47	57	46	59	61	66	53
Male	43	42	36	46	46	36	42	41	36	39	41
Asian	na	na	na	na	na	1,474	1,593	1,584	1,581	1,651	1,583
Female	na	na	na	na	na	797	923	871	900	929	858
Male	na	na	na	na	na	677	670	713	681	722	725
Asian or Pacific Islander <sup>b</sup>	1,318	1,465	1,432	1,443	1,537	na	na	na	na	na	na
Female	697	778	773	799	857	na	na	na	na	na	na
Male	621	687	659	644	680	na	na	na	na	na	na

TABLE 7-7

## S&amp;E doctorates awarded to U.S. citizens and permanent residents, by field, sex, ethnicity, and race: 2006–16

(Number)

Field, sex, ethnicity, and race	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Black or African American	789	847	855	902	819	960	965	1,090	1,203	1,202	1,208
Female	502	543	546	587	546	617	617	695	775	789	795
Male	287	304	309	315	273	343	348	395	428	413	413
Native Hawaiian or Other Pacific Islander	na	na	na	na	na	29	18	16	25	25	27
Female	na	na	na	na	na	14	8	11	16	14	17
Male	na	na	na	na	na	15	10	5	9	11	10
White	11,428	12,008	12,108	12,317	11,992	12,355	12,663	13,115	13,569	13,536	13,335
Female	5,589	6,018	6,009	6,087	5,792	6,016	6,170	6,372	6,709	6,621	6,346
Male	5,839	5,990	6,099	6,230	6,200	6,339	6,493	6,743	6,860	6,915	6,989
More than one race <sup>c</sup>	na	na	na	na	na	150	190	217	299	347	429
Female	na	na	na	na	na	82	101	121	168	180	243
Male	na	na	na	na	na	68	89	96	131	167	186
Other or unknown race and ethnicity	1,164	1,251	1,492	1,478	1,649	1,749	1,679	1,685	1,795	1,732	1,607
Female	577	600	693	741	765	872	807	869	921	885	811
Male	587	651	799	737	884	877	872	816	874	847	796
Agricultural sciences	640	643	668	715	639	660	694	770	755	888	849
Female	259	278	274	350	321	317	330	370	365	439	410
Male	381	365	394	365	318	343	364	400	390	449	439
Hispanic or Latino <sup>a</sup>	36	15	18	21	33	45	41	45	49	47	58
Female	18	5	7	13	21	24	21	26	21	25	29
Male	18	10	11	8	12	21	20	19	28	22	29
Non-Hispanic or Latino	604	628	650	694	606	615	653	725	706	841	791
Female	241	273	267	337	300	293	309	344	344	414	381
Male	363	355	383	357	306	322	344	381	362	427	410
American Indian or Alaska Native	1	3	8	5	6	5	9	4	5	8	6
Female	1	2	3	2	3	4	4	3	2	6	3
Male	0	1	5	3	3	1	5	1	3	2	3
Asian	na	na	na	na	na	28	34	29	34	35	43
Female	na	na	na	na	na	16	21	13	19	17	31
Male	na	na	na	na	na	12	13	16	15	18	12
Asian or Pacific Islander <sup>b</sup>	25	24	34	34	32	na	na	na	na	na	na
Female	14	14	20	18	17	na	na	na	na	na	na
Male	11	10	14	16	15	na	na	na	na	na	na
Black or African American	28	24	26	28	47	21	38	33	32	31	38
Female	14	17	18	19	30	8	25	21	18	16	23
Male	14	7	8	9	17	13	13	12	14	15	15
Native Hawaiian or Other Pacific Islander	na	na	na	na	na	1	0	1	1	1	0
Female	na	na	na	na	na	0	0	0	0	1	0
Male	na	na	na	na	na	1	0	1	1	0	0
White	526	541	534	576	480	509	519	586	577	673	633
Female	204	221	204	265	229	239	238	273	277	317	294
Male	322	320	330	311	251	270	281	313	300	356	339
More than one race <sup>c</sup>	na	na	na	na	na	5	4	7	4	14	15
Female	na	na	na	na	na	3	0	3	4	9	9
Male	na	na	na	na	na	2	4	4	0	5	6
Other or unknown race and ethnicity	24	36	48	51	41	46	49	65	53	79	56
Female	8	19	22	33	21	23	21	31	24	48	21
Male	16	17	26	18	20	23	28	34	29	31	35
Biological sciences	4,377	4,713	5,091	5,310	5,447	5,513	5,705	5,710	5,957	5,720	5,740
Female	2,140	2,327	2,560	2,825	2,930	2,916	3,096	3,069	3,190	3,033	3,030
Male	2,237	2,386	2,531	2,485	2,517	2,597	2,609	2,641	2,767	2,687	2,710

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## S&amp;E doctorates awarded to U.S. citizens and permanent residents, by field, sex, ethnicity, and race: 2006–16

(Number)

Field, sex, ethnicity, and race	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Hispanic or Latino <sup>a</sup>	212	226	274	282	326	324	329	393	379	425	454
Female	111	116	140	151	172	176	186	230	207	236	272
Male	101	110	134	131	154	148	143	163	172	189	182
Non-Hispanic or Latino	4,165	4,487	4,817	5,028	5,121	5,189	5,376	5,317	5,578	5,295	5,286
Female	2,029	2,211	2,420	2,674	2,758	2,740	2,910	2,839	2,983	2,797	2,758
Male	2,136	2,276	2,397	2,354	2,363	2,449	2,466	2,478	2,595	2,498	2,528
American Indian or Alaska Native	19	23	20	27	21	25	33	25	16	24	24
Female	7	16	14	12	15	11	18	16	12	14	12
Male	12	7	6	15	6	14	15	9	4	10	12
Asian	na	na	na	na	na	596	659	656	646	667	632
Female	na	na	na	na	na	326	403	386	374	396	351
Male	na	na	na	na	na	270	256	270	272	271	281
Asian or Pacific Islander <sup>b</sup>	477	563	575	567	650	na	na	na	na	na	na
Female	241	299	308	326	385	na	na	na	na	na	na
Male	236	264	267	241	265	na	na	na	na	na	na
Black or African American	173	173	229	252	206	249	267	284	271	219	245
Female	100	102	143	166	147	156	168	179	176	144	154
Male	73	71	86	86	59	93	99	105	95	75	91
Native Hawaiian or Other Pacific Islander	na	na	na	na	na	12	10	7	12	8	11
Female	na	na	na	na	na	8	5	5	8	6	6
Male	na	na	na	na	na	4	5	2	4	2	5
White	3,206	3,426	3,608	3,782	3,759	3,787	3,859	3,860	4,067	3,886	3,881
Female	1,541	1,659	1,781	1,958	1,955	1,975	2,021	2,000	2,114	1,996	1,975
Male	1,665	1,767	1,827	1,824	1,804	1,812	1,838	1,860	1,953	1,890	1,906
More than one race <sup>c</sup>	na	na	na	na	na	44	59	62	99	110	127
Female	na	na	na	na	na	24	36	38	49	58	71
Male	na	na	na	na	na	20	23	24	50	52	56
Other or unknown race and ethnicity	290	302	385	400	485	476	489	423	467	381	366
Female	140	135	174	212	256	240	259	215	250	183	189
Male	150	167	211	188	229	236	230	208	217	198	177
Computer sciences	551	680	667	730	782	772	819	849	875	864	816
Female	130	145	153	161	177	148	164	181	187	189	172
Male	421	535	514	569	605	624	655	668	688	675	644
Hispanic or Latino <sup>a</sup>	6	17	16	23	17	19	26	40	31	42	36
Female	3	3	2	4	7	0	6	9	10	9	7
Male	3	14	14	19	10	19	20	31	21	33	29
Non-Hispanic or Latino	545	663	651	707	765	753	793	809	844	822	780
Female	127	142	151	157	170	148	158	172	177	180	165
Male	418	521	500	550	595	605	635	637	667	642	615
American Indian or Alaska Native	6	3	0	2	3	3	2	0	7	4	1
Female	3	1	0	1	0	1	1	0	2	0	1
Male	3	2	0	1	3	2	1	0	5	4	0
Asian	na	na	na	na	na	128	129	128	110	112	88
Female	na	na	na	na	na	34	37	29	34	32	25
Male	na	na	na	na	na	94	92	99	76	80	63
Asian or Pacific Islander <sup>b</sup>	92	111	87	116	124	na	na	na	na	na	na
Female	25	26	17	29	34	na	na	na	na	na	na
Male	67	85	70	87	90	na	na	na	na	na	na
Black or African American	21	30	24	30	33	31	39	52	52	57	69
Female	8	12	12	9	11	12	16	19	16	19	27
Male	13	18	12	21	22	19	23	33	36	38	42

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## S&amp;E doctorates awarded to U.S. citizens and permanent residents, by field, sex, ethnicity, and race: 2006–16

(Number)

Field, sex, ethnicity, and race	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Native Hawaiian or Other Pacific Islander	na	na	na	na	na	2	0	0	0	0	1
Female	na	na	na	na	na	0	0	0	0	0	0
Male	na	na	na	na	na	2	0	0	0	0	1
White	356	437	446	483	506	514	526	531	554	535	516
Female	77	81	89	102	107	83	90	95	91	101	89
Male	279	356	357	381	399	431	436	436	463	434	427
More than one race <sup>c</sup>	na	na	na	na	na	3	3	3	7	16	19
Female	na	na	na	na	na	1	0	1	1	3	4
Male	na	na	na	na	na	2	3	2	6	13	15
Other or unknown race and ethnicity	70	82	94	76	99	72	94	95	114	98	86
Female	14	22	33	16	18	17	14	28	33	25	19
Male	56	60	61	60	81	55	80	67	81	73	67
Earth, atmospheric, and ocean sciences	389	481	436	477	481	472	498	540	583	566	610
Female	148	205	168	191	199	190	224	256	277	252	266
Male	241	276	268	286	282	282	274	284	306	314	344
Hispanic or Latino <sup>a</sup>	12	18	17	14	16	14	18	24	21	31	27
Female	6	12	10	4	5	8	11	11	10	17	13
Male	6	6	7	10	11	6	7	13	11	14	14
Non-Hispanic or Latino	377	463	419	463	465	458	480	516	562	535	583
Female	142	193	158	187	194	182	213	245	267	235	253
Male	235	270	261	276	271	276	267	271	295	300	330
American Indian or Alaska Native	0	2	2	2	2	0	2	4	1	3	5
Female	0	1	0	1	0	0	0	0	1	2	2
Male	0	1	2	1	2	0	2	4	0	1	3
Asian	na	na	na	na	na	22	19	13	21	17	28
Female	na	na	na	na	na	8	13	7	12	8	13
Male	na	na	na	na	na	14	6	6	9	9	15
Asian or Pacific Islander <sup>b</sup>	23	11	17	15	15	na	na	na	na	na	na
Female	11	5	7	8	10	na	na	na	na	na	na
Male	12	6	10	7	5	na	na	na	na	na	na
Black or African American	3	7	7	6	5	5	15	11	12	11	11
Female	2	3	3	4	1	2	7	5	5	3	6
Male	1	4	4	2	4	3	8	6	7	8	5
Native Hawaiian or Other Pacific Islander	na	na	na	na	na	0	1	0	0	1	0
Female	na	na	na	na	na	0	1	0	0	1	0
Male	na	na	na	na	na	0	0	0	0	0	0
White	328	400	349	390	395	385	404	450	483	444	480
Female	119	161	134	152	164	154	177	218	227	190	200
Male	209	239	215	238	231	231	227	232	256	254	280
More than one race <sup>c</sup>	na	na	na	na	na	1	6	5	9	8	14
Female	na	na	na	na	na	1	1	2	6	4	9
Male	na	na	na	na	na	0	5	3	3	4	5
Other or unknown race and ethnicity	23	43	44	50	48	45	33	33	36	51	45
Female	10	23	14	22	19	17	14	13	16	27	23
Male	13	20	30	28	29	28	19	20	20	24	22
Mathematics and statistics	583	645	671	788	863	849	852	912	948	900	982
Female	151	193	218	235	245	230	224	242	254	227	252
Male	432	452	453	553	618	619	628	670	694	673	730
Hispanic or Latino <sup>a</sup>	27	21	29	35	31	29	39	34	35	35	62
Female	11	4	5	12	8	9	10	6	7	7	9
Male	16	17	24	23	23	20	29	28	28	28	53

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## S&amp;E doctorates awarded to U.S. citizens and permanent residents, by field, sex, ethnicity, and race: 2006–16

(Number)

Field, sex, ethnicity, and race	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Non-Hispanic or Latino	556	624	642	753	832	820	813	878	913	865	920
Female	140	189	213	223	237	221	214	236	247	220	243
Male	416	435	429	530	595	599	599	642	666	645	677
American Indian or Alaska Native	0	1	2	3	2	5	0	3	1	1	4
Female	0	1	0	1	0	0	0	1	1	0	1
Male	0	0	2	2	2	5	0	2	0	1	3
Asian	na	na	na	na	na	89	70	102	79	80	101
Female	na	na	na	na	na	38	22	34	32	31	33
Male	na	na	na	na	na	51	48	68	47	49	68
Asian or Pacific Islander <sup>b</sup>	63	79	53	78	84	na	na	na	na	na	na
Female	20	29	24	27	39	na	na	na	na	na	na
Male	43	50	29	51	45	na	na	na	na	na	na
Black or African American	20	21	22	27	24	23	21	27	27	20	36
Female	5	5	11	16	9	9	10	6	9	6	11
Male	15	16	11	11	15	14	11	21	18	14	25
Native Hawaiian or Other Pacific Islander	na	na	na	na	na	1	2	0	1	2	0
Female	na	na	na	na	na	0	0	0	0	0	0
Male	na	na	na	na	na	1	2	0	1	2	0
White	428	458	490	559	634	627	636	652	708	676	656
Female	102	132	161	154	168	155	163	170	179	161	157
Male	326	326	329	405	466	472	473	482	529	515	499
More than one race <sup>c</sup>	na	na	na	na	na	2	9	11	13	8	35
Female	na	na	na	na	na	1	4	3	4	3	12
Male	na	na	na	na	na	1	5	8	9	5	23
Other or unknown race and ethnicity	45	65	75	86	88	73	75	83	84	78	88
Female	13	22	17	25	21	18	15	22	22	19	29
Male	32	43	58	61	67	55	60	61	62	59	59
Physical sciences	2,183	2,266	2,307	2,486	2,489	2,652	2,709	2,774	2,823	2,974	3,016
Female	655	713	692	809	812	860	857	916	906	969	950
Male	1,528	1,553	1,615	1,677	1,677	1,792	1,852	1,858	1,917	2,005	2,066
Hispanic or Latino <sup>a</sup>	93	92	112	115	108	123	132	133	151	154	159
Female	32	33	40	46	50	40	44	58	45	60	60
Male	61	59	72	69	58	83	88	75	106	94	99
Non-Hispanic or Latino	2,090	2,174	2,195	2,371	2,381	2,529	2,577	2,641	2,672	2,820	2,857
Female	623	680	652	763	762	820	813	858	861	909	890
Male	1,467	1,494	1,543	1,608	1,619	1,709	1,764	1,783	1,811	1,911	1,967
American Indian or Alaska Native	9	7	5	10	11	10	6	8	16	11	5
Female	1	0	2	4	4	6	3	2	6	4	2
Male	8	7	3	6	7	4	3	6	10	7	3
Asian	na	na	na	na	na	204	237	236	240	256	250
Female	na	na	na	na	na	89	112	106	104	111	101
Male	na	na	na	na	na	115	125	130	136	145	149
Asian or Pacific Islander <sup>b</sup>	220	222	216	204	217	na	na	na	na	na	na
Female	97	91	86	86	84	na	na	na	na	na	na
Male	123	131	130	118	133	na	na	na	na	na	na
Black or African American	55	86	77	78	80	86	79	95	107	107	99
Female	21	37	36	41	37	45	34	49	49	52	49
Male	34	49	41	37	43	41	45	46	58	55	50
Native Hawaiian or Other Pacific Islander	na	na	na	na	na	6	4	0	3	5	2
Female	na	na	na	na	na	1	2	0	2	2	0
Male	na	na	na	na	na	5	2	0	1	3	2

TABLE 7-7

## S&amp;E doctorates awarded to U.S. citizens and permanent residents, by field, sex, ethnicity, and race: 2006–16

(Number)

Field, sex, ethnicity, and race	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
White	1,645	1,667	1,685	1,852	1,801	1,913	1,958	2,041	2,002	2,132	2,218
Female	455	495	469	565	551	574	576	624	602	643	642
Male	1,190	1,172	1,216	1,287	1,250	1,339	1,382	1,417	1,400	1,489	1,576
More than one race <sup>c</sup>	na	na	na	na	na	26	28	38	43	46	62
Female	na	na	na	na	na	7	5	14	13	10	33
Male	na	na	na	na	na	19	23	24	30	36	29
Other or unknown race and ethnicity	161	192	212	227	272	284	265	223	261	263	221
Female	49	57	59	67	86	98	81	63	85	87	63
Male	112	135	153	160	186	186	184	160	176	176	158
Psychology	4,230	4,450	4,359	3,770	3,334	3,694	3,616	4,017	4,320	4,261	4,292
Female	3,083	3,235	3,142	2,730	2,354	2,678	2,622	2,939	3,191	3,155	3,129
Male	1,147	1,215	1,217	1,040	980	1,016	994	1,078	1,129	1,106	1,163
Hispanic or Latino <sup>a</sup>	367	417	420	316	277	335	342	408	483	488	590
Female	282	315	315	231	212	243	246	323	377	370	438
Male	85	102	105	85	65	92	96	85	106	118	152
Non-Hispanic or Latino	3,863	4,033	3,939	3,454	3,057	3,359	3,274	3,609	3,837	3,773	3,702
Female	2,801	2,920	2,827	2,499	2,142	2,435	2,376	2,616	2,814	2,785	2,691
Male	1,062	1,113	1,112	955	915	924	898	993	1,023	988	1,011
American Indian or Alaska Native	32	36	31	23	19	23	21	31	20	21	22
Female	23	23	22	16	12	21	13	23	15	16	16
Male	9	13	9	7	7	2	8	8	5	5	6
Asian	na	na	na	na	na	189	213	199	213	255	228
Female	na	na	na	na	na	143	174	151	174	197	177
Male	na	na	na	na	na	46	39	48	39	58	51
Asian or Pacific Islander <sup>b</sup>	242	265	252	207	197	na	na	na	na	na	na
Female	180	212	196	163	152	na	na	na	na	na	na
Male	62	53	56	44	45	na	na	na	na	na	na
Black or African American	256	278	271	259	212	275	238	299	362	414	406
Female	214	220	209	200	177	218	194	243	300	330	331
Male	42	58	62	59	35	57	44	56	62	84	75
Native Hawaiian or Other Pacific Islander	na	na	na	na	na	1	0	4	6	3	10
Female	na	na	na	na	na	1	0	3	5	3	10
Male	na	na	na	na	na	0	0	1	1	0	0
White	3,034	3,171	3,036	2,664	2,342	2,471	2,435	2,633	2,799	2,661	2,566
Female	2,172	2,262	2,157	1,899	1,608	1,761	1,730	1,857	2,001	1,922	1,818
Male	862	909	879	765	734	710	705	776	798	739	748
More than one race <sup>c</sup>	na	na	na	na	na	40	45	47	72	78	104
Female	na	na	na	na	na	29	32	36	56	59	72
Male	na	na	na	na	na	11	13	11	16	19	32
Other or unknown race and ethnicity	299	283	349	301	287	360	322	396	365	341	366
Female	212	203	243	221	193	262	233	303	263	258	267
Male	87	80	106	80	94	98	89	93	102	83	99
Social sciences	2,733	2,723	2,807	2,910	3,028	3,275	3,439	3,523	3,681	3,878	3,637
Female	1,371	1,455	1,466	1,494	1,524	1,723	1,797	1,802	1,990	2,066	1,884
Male	1,362	1,268	1,341	1,416	1,504	1,552	1,642	1,721	1,691	1,812	1,753
Hispanic or Latino <sup>a</sup>	145	127	146	139	165	188	209	211	224	231	273
Female	63	69	82	65	80	107	118	114	133	122	142
Male	82	58	64	74	85	81	91	97	91	109	131
Non-Hispanic or Latino	2,588	2,596	2,661	2,771	2,863	3,087	3,230	3,312	3,457	3,647	3,364
Female	1,308	1,386	1,384	1,429	1,444	1,616	1,679	1,688	1,857	1,944	1,742
Male	1,280	1,210	1,277	1,342	1,419	1,471	1,551	1,624	1,600	1,703	1,622

TABLE 7-7

## S&amp;E doctorates awarded to U.S. citizens and permanent residents, by field, sex, ethnicity, and race: 2006–16

(Number)

Field, sex, ethnicity, and race	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
American Indian or Alaska Native	22	22	19	29	29	22	15	25	31	33	27
Female	11	11	10	18	13	14	7	14	22	24	16
Male	11	11	9	11	16	8	8	11	9	9	11
Asian	na	na	na	na	na	218	232	221	238	229	213
Female	na	na	na	na	na	143	141	145	151	137	127
Male	na	na	na	na	na	75	91	76	87	92	86
Asian or Pacific Islander <sup>b</sup>	176	190	198	222	218	na	na	na	na	na	na
Female	109	102	115	142	136	na	na	na	na	na	na
Male	67	88	83	80	82	na	na	na	na	na	na
Black or African American	233	228	199	222	212	270	268	289	340	343	304
Female	138	147	114	132	134	167	163	173	202	219	194
Male	95	81	85	90	78	103	105	116	138	124	110
Native Hawaiian or Other Pacific Islander	na	na	na	na	na	6	1	4	2	5	3
Female	na	na	na	na	na	4	0	3	1	1	1
Male	na	na	na	na	na	2	1	1	1	4	2
White	1,905	1,908	1,960	2,011	2,075	2,149	2,326	2,362	2,379	2,529	2,385
Female	919	1,007	1,014	992	1,010	1,075	1,175	1,135	1,218	1,291	1,171
Male	986	901	946	1,019	1,065	1,074	1,151	1,227	1,161	1,238	1,214
More than one race <sup>c</sup>	na	na	na	na	na	29	36	44	52	67	53
Female	na	na	na	na	na	16	23	24	35	34	33
Male	na	na	na	na	na	13	13	20	17	33	20
Other or unknown race and ethnicity	252	248	285	287	329	393	352	367	415	441	379
Female	131	119	131	145	151	197	170	194	228	238	200
Male	121	129	154	142	178	196	182	173	187	203	179
Engineering	2,714	2,994	3,180	3,374	3,507	3,713	3,926	4,123	4,451	4,620	4,602
Female	606	677	804	856	906	920	1,001	1,019	1,102	1,164	1,127
Male	2,108	2,317	2,376	2,518	2,601	2,793	2,925	3,104	3,349	3,456	3,475
Hispanic or Latino <sup>a</sup>	105	138	130	153	196	182	191	202	247	286	285
Female	31	45	38	38	65	47	59	67	69	72	76
Male	74	93	92	115	131	135	132	135	178	214	209
Non-Hispanic or Latino	2,609	2,856	3,050	3,221	3,311	3,531	3,735	3,921	4,204	4,334	4,317
Female	575	632	766	818	841	873	942	952	1,033	1,092	1,051
Male	2,034	2,224	2,284	2,403	2,470	2,658	2,793	2,969	3,171	3,242	3,266
American Indian or Alaska Native	7	8	15	19	10	15	11	7	13	12	10
Female	1	2	5	6	2	1	3	0	2	4	3
Male	6	6	10	13	8	14	8	7	11	8	7
Asian	na	na	na	na	na	599	573	589	637	664	661
Female	na	na	na	na	na	186	169	199	215	205	201
Male	na	na	na	na	na	413	404	390	422	459	460
Asian or Pacific Islander <sup>b</sup>	470	508	501	504	517	na	na	na	na	na	na
Female	129	119	151	138	174	na	na	na	na	na	na
Male	341	389	350	366	343	na	na	na	na	na	na
Black or African American	110	117	128	139	154	141	175	187	172	165	197
Female	44	39	48	43	52	56	67	67	68	55	71
Male	66	78	80	96	102	85	108	120	104	110	126
Native Hawaiian or Other Pacific Islander	na	na	na	na	na	4	2	7	8	1	3
Female	na	na	na	na	na	2	1	1	2	0	0
Male	na	na	na	na	na	2	1	6	6	1	3
White	1,818	1,973	2,112	2,235	2,286	2,393	2,592	2,701	2,928	3,023	2,967
Female	360	405	491	528	508	549	607	596	635	707	658
Male	1,458	1,568	1,621	1,707	1,778	1,844	1,985	2,105	2,293	2,316	2,309

TABLE 7-7

## S&amp;E doctorates awarded to U.S. citizens and permanent residents, by field, sex, ethnicity, and race: 2006–16

(Number)

Field, sex, ethnicity, and race	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
More than one race <sup>c</sup>	na	na	na	na	na	32	42	59	78	87	116
Female	na	na	na	na	na	9	14	15	20	33	24
Male	na	na	na	na	na	23	28	44	58	54	92
Other or unknown race and ethnicity	204	250	294	324	344	347	340	371	368	382	363
Female	41	67	71	103	105	70	81	74	91	88	94
Male	163	183	223	221	239	277	259	297	277	294	269

na = not applicable; data were not collected for this detail.

S&E = science and engineering.

<sup>a</sup> Beginning in 2008, the category includes Hispanic or Latino of one or more races.

<sup>b</sup> Pacific Islander includes Native Hawaiian or Other Pacific Islander. Prior to the 2011 collection cycle, the Asian or Pacific Islander category included Asians, Native Hawaiians, and Pacific Islanders.

<sup>c</sup> In 2011, the survey required institutions to begin reporting information on more than one race, along with information in the other racial and ethnic categories, but institutions were not required to update the race and ethnicity data of individuals who were already in the system. Therefore, the number reported for more than one race for the early years following 2011 is likely to be an undercount. Prior to the 2011 collection cycle, more than one race was reported under Other or unknown race or ethnicity.

**Note(s)**

Data in this table differ from doctoral degree data in this report that are based on the National Center for Science and Engineering Statistics' Survey of Earned Doctorates (SED). SED data are for research doctorates only. The greatest differences are in psychology, education, and medical and other health sciences. Before 2008, the National Center for Education Statistics (NCES) used two doctoral degree categories: doctor's and first-professional. In 2008 and 2009, NCES allowed optional reporting in three new doctoral degree categories: doctor's—research or scholarship, doctor's—professional practice, and doctor's—other. In 2010, NCES required institutions to use only the three new doctoral degree categories. With the new reporting system, degrees formerly classified as first-professional (e.g., MDs and JDs) can be reported as doctoral degrees, most often as doctor's—professional practice. In this table, data for 2008 and 2009 include only doctorates reported under the old doctor's degree category plus those reported as doctor's—research or scholarship. Data for 2010 and later include only doctorates reported as doctor's—research or scholarship. Starting with 2011, data reflects the Office of Management and Budget's latest race and ethnicity categories. Data are based on degree-granting institutions eligible to participate in Title IV federal financial aid programs and do not match previously published data that were based on accredited higher education institutions.

**Source(s)**

National Science Foundation, National Center for Science and Engineering Statistics, special tabulations of U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, Completions Survey, unrevised provisional release data.